

GP-301753

## SIMPLE OPTIMAL ESTIMATOR FOR PbA STATE OF CHARGE

### ABSTRACT OF THE DISCLOSURE

A state of charge estimator for a battery includes a meter that generates a terminal voltage signal of the battery and a terminal current signal of the battery. A controller employs a linearized model of the battery and a time-varying state estimator. The controller process a synthesized input based on the terminal current and the terminal voltage to estimate the battery state of charge.

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